

CLAIMS

1.- Microcapsules for the administration of active ingredients, characterized in that they consist of :

- a core comprising one or more active ingredient, a surfactant and at least one wax or at least one fat, or a mixture of at least one wax and at least one fat, the fats and waxes having melting points exceeding 45°C, and
- a coating comprising one or more non-fat substances selected from the group comprising polysaccharides, animal proteins, milk proteins and vegetable proteins.

2.- Microcapsules according to claim 1, characterized in that the core contains one or more coadjuvants selected from the group comprising antioxidants and vegetable extracts and oils.

3.- Microcapsules according to any of claims 1 and 2, characterized in that the active ingredient is a nutritional, dietetic or pharmacologically active ingredient that is easily degradable.

4.- Microcapsules according to any of claims 1 to 3, characterized in that the active ingredient is selected from the group comprising polyunsaturated oils of a vegetable or animal origin.

5.- Microcapsules according to claim 4, characterized in that the polyunsaturated oils are selected from the group comprising omega-3 and omega-6 oils.

6.- Microcapsules according to any of claims 1 to 3, characterized in that the active ingredient is selected from ascorbyl palmitate, carotenoids, fat-soluble vitamins, peptides, enzymes, reduced iron, omega-9 oils, olive oil, linseed oil, nut oil, conjugated linoleic acids and fat-soluble polyphenols.

7.- Microcapsules according to claim 6, characterized in that the active ingredient is a carotenoid selected from lycopene, lutein and zeaxanthin.

8.- Microcapsules according to claim 6, characterized in that the active ingredient is a peptide with antibiotic activity.

9.- Microcapsules according to any of claims 1 to 3, 6 and 8, characterized in that the active ingredient is zinc bacitracin.

10.- Microcapsules according to any of the previous claims, characterized in that the core incorporates Loders Croklaan's Revel A® as the only fat.

11.- Microcapsules according to any of the previous claims, characterized in that the core incorporates carnauba wax or candelilla wax as the only wax.

12.- Microcapsules according to any of the previous claims, characterized in that the surfactant is selected from polysorbate-60 and sodium oleate.

13.- Microcapsules according to claim 2, characterized in that the antioxidant or antioxidants are chosen from the group comprising BHT, BHA, vitamin E acetate, vitamin C palmitate and/or rosemary essential oil.

14.- A nutritional, dietetic, veterinary or pharmaceutical composition characterized in that it incorporates microcapsules according to claims 1 to 13.

15.- A process of obtaining the microcapsules according to claims 1 to 13, characterized in that it comprises the steps of:

- 10 a) heating a wax or a fat, or a mixture of waxes or a mixture of fats, or a mixture of one or more fats and one or more waxes, the fats and waxes being suitable for nutritional, dietetic, pharmaceutical or veterinary use, and the fats and waxes having melting points exceeding 45 °C, higher than the melting temperature of the corresponding wax/waxes or fat/fats;
- 15 b) mixing with an active ingredient and a surfactant;
- c) emulsifying in an aqueous solution of one or more non-fat substances suitable for nutritional, dietetic, pharmaceutical or veterinary use, selected from the group comprising polysaccharides, animal proteins, milk proteins and vegetable proteins;
- d) cooling the emulsion to under the melting temperature of the wax/waxes or fat/fats;
- 20 e) spray-drying the previous emulsion.